

The impact of oil prices on the dollar value

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Project Objectives

- The goal of this project is to prove that there is a strong, positive correlation between oil prices and the value of the dollar. Once a correlation between oil prices and the value of the dollar has been established, the project will examine how external factors such as elections, natural disasters and pandemics will impact oil prices and by association, the value of the dollar.

Team Members

Rita



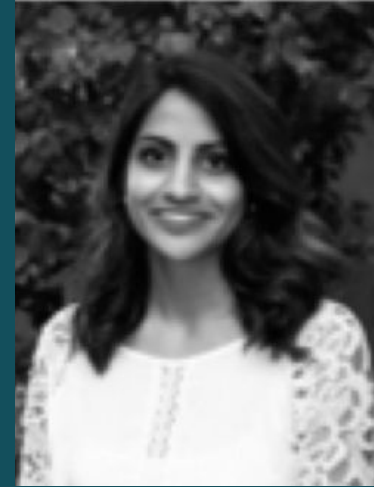
Rita works at Frontier Communications as a Network Planner. At her director's prompting, she chose the Berkeley Bootcamp Data Analytics program to gain relevant analysis skills.

Juan



Juan works at Kings Hawaiian as Business Solution Analyst in the Data & Technology Services department. He is very excited to learn about ML and to be able to use it at his work, which will enable ML Analysis.

Sheela



Sheela graduated from UC Berkeley in 2017 with a degree in Human Biology. Currently is a project manager at AstraZeneca. She is passionate about using data to support business development and growth needs of healthcare systems and biopharmaceuticals.

Reason for selecting topic

- We have chosen to examine the correlation between oil prices and the value of the dollar while also examining the effects of external factors the project has very interesting real world applications that we would like to explore in-depth. In addition to this, the project is very relevant to the current state of affairs in the world with the upcoming 2020 election and the COVID-19 pandemic

Data Sources

1. US Dollar Index 43 years

Source: www.macrotrends.net

580 Records / 1973 to 2019

2. WTI Crude Oil Prices - 10 Year Daily Chart

Source: www.macrotrends.net

2,535 records / 2010-2020

3. Energy Information Administration

Source: http://www.eia.gov/oil_gas/petroleum/data_publications/wrgp/mogas_history.html

1,326 Records / 1994-2020

4. Global Crisis Source: Harvard Business School

Source: <https://www.hbs.edu/behavioral-finance-and-financial-stability/data/banking-system/Pages/default.aspx>

15,000 Records / 1800-2020

5. Standard and Poor's (S&P) 500 Index Data

Source: <https://datahub.io/collections/stock-market-data>

1,700 Records / 1871-2018

Description of Data Sources

1. “US Dollar Index 43 years” data provides data on fluctuating dollar value trends throughout decades. Using this data it is possible to see how major global events have impacted the value of the dollar
2. “WTI Crude Oil Prices - 10 Year Daily Chart” data set provides information on fluctuating oil prices throughout the past decade. Using this data it is possible to see how major global events have impacted the value of oil
3. “Energy Information Administration” data provides prices for gasoline in the USA for past 10 years. This will be backup data to oil prices.
4. “Global Crisis Source: Harvard Business School” data provides information on historical events that have strongly impacted banks in the world. We will use this data to understand how major events have affected oil prices and the dollar value
5. “Standard and Poor's (S&P) 500 Index Data” data provides the the USA historical market index for S&P 500. Using this data we will understand fluctuations of the dollar value and its correlation to stock market trends.

Questions we hope to achieve with data

We have 4 main questions we hope to answer throughout the project

1. Is there a strong, positive correlation between oil prices and the dollar value?
2. How would a stock market crash in the US affect oil prices and the dollar value?
3. How does a pandemic affect oil prices and the dollar value?
4. How does an election in the US affect oil prices and the dollar value?